5-1967

Developmental Learning of Concepts of the Pre-School Child

Gordon Geddes
Utah State University

DEVELOPMENTAL LEARNING OF CONCEPTS OF THE PRE-SCHOOL CHILD

by

Gordon G. Geddes

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Child Development

ACKNOWLEDGEMENTS

The writer wishes to express sincere appreciation to Dr. Don C. Carter, Head of Child Development, College of Family Life, Utah State University for his assistance, time, and encouragement he extended to me so willingly as Committee Chairman on my Thesis Committee. Sincere appreciation to the other members of the committee; Mrs. Carroll Lambert, Dr. Jay Schvaneveldt and Mrs. Klara Ingold for their time and contributions. Appreciation to the children and raters for their cooperation in the Child Development Laboratory who made the experimenting possible and who will remain anonymous. Special thanks to my wife, ReNae, for her help, time, and encouragement.

Gordon Grant Geddes

TABLE OF CONTENTS

ABSTRACT

Developmental Learning of Concepts

Of The Pre-School Child

by

Gordon G. Geddes, Master of Science

Utah State University, 1967

Major Professor: Dr. Don C. Carter
Department: Child Development

A research experiment was performed in the Utah State University Child Development Laboratory on a group of pre-school children consisting of ten boys and ten girls between the ages of three and four years in an attempt to discover that teaching method which will best sustain a child's interest while teaching a foreign language in an experimental situation.

The procedure involved the evaluation of three different methods: 1) German conversation in a group utilizing audio-visual aids, 2) Group singing of a German song, and 3) Telling a story in German using a flannel board with illustrations. These three methods were performed three times each over a five-week period.

The results showed that there was not statistically a significant difference. The findings did show, however, that the flannelboard story sustained the interest of the group best, next the singing of a German song and the least effective was conversation in German.

The results did indicate that the interest of the children dropped considerably from the first to the third time that the conversation method was performed. The interest of the children increased considerably from the first to the third time that the singing of a German song was performed. The interest of the children appeared to stay about the same over the three times that the flannel-board story was performed.

Femininity and masculinity appear to influence the responses of children to a language-learning situation. That method which will best sustain children's interest in a language-learning situation appears to be dependent on where the children are in their familiarity with the language.

(55 pages)

INTRODUCTION

A pre-school child is confronted with learning new concepts every day. For years people have been developing new theories and trying experiments with children in an effort to develop newer and better ways of helping children to learn more effectively. Through various research experiments, data have indicated that some techniques of teaching children are better than others. There are apparently many different variables that influence the learning of a concept for a pre-school child and many developmental stages a child goes through in order to learn new ideas.

Teaching children a foreign language has been recognized as a very complex task for many years. Children of various ages and various groups have been taught a foreign language through the years by many different teaching methods. Continually, researchers and language teaching experts come up with newer and better methods of teaching a foreign language to children. There are many different methods of teaching and there are various opinions as to when and how a foreign language should be taught.

When a pre-school child is confronted with learning a foreign language, it will be a new, strange, unfamiliar concept for him to learn. How does a pre-school child learn a new concept? What influences must be present in order for a child to learn this new

idea? Which teaching method will be the best for the child to learn this new idea? Which teaching method will best sustain the child's interest?

Statement of Problem

A pre-school child may be taught a concept through various methods. Research has indicated some methods to be more successful than others. Data have shown that children are more capable of learning a foreign language than are adults. An important aspect of helping children learn is to utilize methods or materials which help sustain children's interest in a learning activity. This study has attempted to measure the interest of the children as they were introduced to a foreign language through various teaching methods.

The objective of the experiment was to attempt to discover that teaching method which best sustains the child's interest in a foreign language experimental situation. The assumption is that the method which is most effective in helping him sustain his interest will also tend to be the method which will contribute most to his learning a new concept.

Method of Procedure

The research experiment was performed in the Utah State University Child Development Laboratory. The experimental sample

consisted of ten boys and ten girls between the ages of three and four years. Two days a week, Tuesday and Thursday, the children were brought to a round rug on the floor of the nursery school where they sat in a circle. There were four teachers who sat with the children, and who were situated in the circle so that they could see all the children.

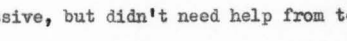
The procedure involved the evaluation of three different methods of introducing a foreign language to this pre-school nursery group over a period of five weeks. An attempt was made to stimulate the children's interest in experimental situations involving the use of the German language, including:

1. Conversation in a group utilizing audio-visual aids.
2. Group singing of a German song.
3. To tell a story in German using a flannel board with illustrations.

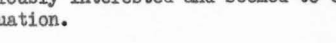
The conversation method was presented the first day of the experimenting which was on a Tuesday. Then on Thursday, the singing of the German song was presented and the following Tuesday, the experimenter told the group a flannel-board story in German. Each method was then performed three separate times by the experimenter in order of conversation, singing a song, and the flannel-board story over a period of five weeks. At the

beginning of each experiment, each teacher received five randomly selected and assigned children each time a method was performed. Each teacher received a questionnaire for each child with his name on a questionnaire. The questionnaire, as illustrated below, had three questions with eight boxes to a question for the ratings:

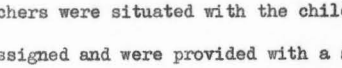
1. Resisted the activity and required personal attention from teacher to remain part of group.



2. Passive, but didn't need help from teacher.



3. Obviously interested and seemed to enjoy the situation.



The teachers were situated with the children so as to see each child assigned and were provided with a stopwatch for timing purposes. Each teaching method lasted approximately ten minutes and during this time, the teachers observed their five children and rated them by a time-sampling method.

As soon as the experimenter let the teachers know that the session was beginning, each teacher started her stopwatch and observed a child for ten seconds. She then had five seconds to record in the first box the reaction of the child during this ten-second period. The teacher then turned to a new questionnaire of a different child and observed this child for ten seconds, recorded the rating in this child's first box and changed to a new questionnaire for a different child. The teacher continued this process until all five children had been observed for ten seconds and a rating was checked in the first box for each child. The teacher then started over with each child and after ten seconds again, recorded the response of each child in the second box and so on for the period of ten minutes. Each teacher, in this ten minutes, had a total of eight ratings on each child and each method was performed three times.

In analyzing and calculating the results, an Analysis of Variance Test was performed. A weighting system was employed which assigned a value of three for each box scored "obviously interested", a weight of two for the score marked "passive", and a weight of one if it was marked "resisted activity". A mean score was calculated on the individual children for the three times each method was performed. A mean score was then calcu-

lated on the twenty children for each teaching method. A table on the results is in the findings.

A pre-test was performed before the first method of teaching was presented. The experimenter read a story to the group and the teachers had their watches, questionnaires, and assigned children. During this time, the teachers were able to work out the difficulties and be oriented and uniform in their ratings for the actual experiment.

After the pre-test was performed, the raters and experimenter discussed what problems had to be worked out. The raters needed to know when the experimenter would start his experimenting, had to become familiar with working the stopwatches, and to acquire assurance as to how to classify each child in the three different classifications of interest or response.

The raters were uniform in their rating inasmuch as they marked a child "interested" if he was looking and listening to the experimenter. If a child was looking around the room or somewhere else besides the experimenter, then he was considered as being "passive". During the experiment, the teachers who were doing the ratings confined their activity to the ratings only. The group was left in control of the experimenter, and if a child resisted the activity and required personal attention from the experimenter to remain part of the group, then he took charge of getting this

child back into the group and this would then be rated as "resisting the activity".

Hypotheses

1. Singing a German song will best sustain the interest of the pre-school group.

2. The flannel-board story told in German will not sustain the children's interest as well as singing the German song, but will sustain their interest better than conversation in German.

3. Conversation in German will be the least effective of the three methods in sustaining the children's interest.

Definition of Terms

1. FLES - Foreign Language in the Elementary School.

2. Pre-school child - child between three and five years of age.

3. Foreign language - any language other than English.

4. Concept - an abstract idea generalized from particular instances.

5. Bilingualism - use of two languages.

REVIEW OF LITERATURE

Although this study deals with teaching pre-school children a foreign language through various teaching methods and measuring the individual child's interest in each method, it is essential to review the literature in regard to ability to learn concepts, interest and motivation of children's learning, and the procedure of learning a foreign language.

Concept Learning

English (21) in dealing with concept learning, explains that children in their early pre-school years have had some experiences and have developed some degree of thinking and reasoning power along with intelligence. Children at this early age are capable of learning and putting together information or knowledge. When a pre-school child is exposed to new things or new concepts, then in order for the child to understand and learn these new ideas, there are many processes which a child will go through.

He believes that in order for a child to learn, he must first comprehend what is to be learned. New information must be related and integrated with previous knowledge. New learning of knowledge is influenced by attitudes and by the established pattern of accepting new information.

The Head Start Program (22) includes a suggestion that a child learns through various steps ranging from simple observation to increasingly complicated play activities. A wide variety of manipulative objects and materials which are exciting and stimulating should be available because these materials are very essential to his learning. The choice of imaginatively selected equipment will allow the child to experience a large assortment of sizes, shapes, textures, sounds and movements. Encouraged by appropriate toys and materials, children might engage in different activities such as dramatic play, expression of themselves through story, music and art, and develop their coordination, perception, and balance. These children may become familiar with a wide range of concrete objects that may help to provide a basis or foundation for learning.

Russell (46) mentions that children's thinking may appear quite different in varying situations and that each situation is usually influenced by certain factors such as the environment which a child is in, the degree to which the child is confronted with a particular problem, and the sort of child in terms of maturity, thinking, and personality, who is doing the thinking. He also indicates that in order to understand children's thinking completely, it is most desirable to include children's perception of the surrounding environment and to know their own feelings about it, and to know what type

of associative thinking is found in their reactions to different stimuli -- to see how they associate it with past experiences, with reality and imaginative thinking. Perception may then be important in determining the raw materials of children's thinking. In his thinking, it seems clear that thinking may be distinguished from such terms as intelligence and learning.

> Intelligence as measured in the typical test involves thinking abilities, usually of a problem-solving variety, but intelligence is a wider term than thinking, denoting capacity for such work rather than the actual process itself. In contrast to learning, thinking is a process moving from some initiation to some conclusions or solution rather than the process of increasing skill or perfecting the execution of the solution. Thinking takes place during learning but is an intermediate phase rather than a final product. (46, p. 6)

It seems clear, too, that Russell (46) thinks that concepts are the most important materials of children's thinking. They seem to develop slowly out of percepts, images, and memories, and are then communicated from one to another through language. Russell also believes that in order for a child to learn the formation of a new concept, he must have a series of experiences that are in one or more respects similar. Putting these together he is able to associate these familiar experiences with this new concept primarily through his intelligence. Even though materials of thinking are there when a child thinks, the nature of thinking can never be studied in its primary state. We may observe the behavior of children,

listen to their languages and notice their responses to different things, but at best, these are only second-hand evidences.

Dennis (43) in experimenting with children found that children who were kept on cradleboards most of their infant days walked as quickly as children not on cradleboards. Through such experiments, he noticed that even though maturation is a major factor in infant development, its importance lies in making learning possible. Maturation in and of itself very frequently produces new developmental items, but maturation along with self-directed activities lead to new infant responses and developmental growth.

He is of the opinion that the techniques employed for cognitive stimulation in the early years of child development may be described in terms of a situational setting and a few principles of interest arousal based on positive attitudes and styles in teaching relations, competence motivation and incidental learning.

Sigel (53) states that our world, in which we live, is made up of a host of diverse stimuli. Some of these are such things as sounds, lights, textures, shapes, sizes, and many innumerable sources of stimulation consistently being introduced upon our senses. Concepts are therefore learned and attained through several important steps and these steps are links bonding the environment with the individual. These important processes of development are intellectual

tools that such an individual may use in organizing his thoughts to his environment and understanding these concepts.

He also states that to bring a child into a situation where he will be able to learn concepts, we should try to instill in him a sense of security that the teacher or teachers know him, like him, are concerned for him, and appreciate his individuality before feeling free to explore and investigate new ventures without fear of failure, censorship, or adult disapproval. A teacher should try to understand the child and feel close to him in order to get trust and confidence in the child for the teacher. The environment should be stimulating and there should be love and warmth shown toward the child.

Sigel (53) further states that a pre-school child has to learn objects exist and to identify them -- that objects differ one from another and that a child must name them after identifying them. He must also learn to identify the whole object and its characteristics. He also tells us that concepts are one of the most important parts of learning of everyday life. A child may be faced with new objects of different size, shape, color, and textures that he has never seen before. If he hasn't seen them before, they will be strange, unfamiliar, and could be confusing to him. This child must see, touch, and feel, associating this with previous experiences.

Sigel (53) also states that learning is based on processes and suggests:

> This complex set of learnings is based on such processes as discrimination, perception, transposition, and generalization -- all facilitated by language. Discrimination learning -- has been demonstrated to be a primary step in a long road toward concept acquisition. Perceptual learning -- to determine how children perceive; what information they get from the environment, and the kinds of stimuli that are attended to and how these change with age. Transposition -- the ability of children to respond to new stimuli with responses learned under a different set of conditions. (53, p. 210)

Bruner (10) states that intelligence is important in concept learning, especially in recalling and associating with past experiences and the new learning situations. He said:

> I shall take the view in what follows that the development of human intellectual functioning from infancy to such perfection as it may reach is shaped by a series of technological advances in the use of mind. Growth depends upon the mastery of techniques and cannot be understood without references to such mastery. These techniques are not, in the main, inventions of the individuals who are 'growing up': They are, rather, skills transmitted with varying efficiency and success by the culture-language being a prime example. Cognitive growth, then, is in a major way from the outside in as well as from the inside out. (10, p. 286)

According to Bruner (10) there are three modes of representation:

1. Enactive representation.
2. Iconic representation.
3. Symbolic representation.

Their appearance in the life of the child is in that order, each depending upon the previous one for its development, yet all of them

remaining more or less intact throughout life. Enactive representation is a mode of representing past events through appropriate motor response. For example, one cannot give an adequate description of familiar sidewalks or floors over which one habitually walks. Iconic representation summarizes events by the selective organization of percepts and of images, by the spatial, temporal, and qualitative structures of the perceptual events in the close but conventionally selective way that a picture stands for the object pictured. Finally, a symbol system represents things by design features that include remoteness and arbitrariness.

Bruner (10) illustrates this symbolic representation by using an example of Piaget's: A child is playing with a rattle in his crib. The rattle drops over the side -- the child moves his clenched hand before his face, opens it, and looks for the rattle. Not finding it, he moves his hand back to the crib and then closes his hand and brings it up again and shakes his hand -- no noise is heard. He tries this several times and then he can make a distinction between shaking his hand with the rattle and shaking his hand without the rattle. He believes that such a system of processing environmental events is the process by which a child learns and associates events with his past knowledge and by putting these together to form cognitive growth. Language is the medium for interpretation, translation, understanding and communication. Thus, it is seen that language usage is important in the learning of new ideas.

Santostefano (47) has investigated differences in cognitive functioning. He states that cognitive controls are employed by a person as he deals with his environment and information it contains in an effort to solve the problem confronting him. He says:

> Cognitive controls are defined as mechanisms or principles which: 1) Govern and determine the amount and organization of information which becomes available to an individual perceiver, 2) Are activated by specific classes and arrangements of stimuli which cause the individual to experience an adaptive intent in terms of this information, 3) Vary in the extent to which they operate in the cognitive functioning of individuals, 4) Evolve in part as a function of life experiences and personality development, 5) Mediate the influence of personality and motivation in the individual's cognitive encounters with the environment, 6) Become enduring aspects of an individual's cognitive functioning and adaptive style. (47, p. 343)

Santostefano (47) also assumes that almost every cognitive response takes the form of an adaptation or of a readaptation. The individual responds when his equilibrium between his environment and his thinking is upset. The information concerned with learning new concepts must be understood, mastered, or dealt with in order to bring this equilibrium back in balance. The information contained in the environment of a young child is experiences by him as complex, massive, ever-changing, stressful and disruptive. Therefore, the child must deal with this information as new and associate it with past experiences or familiar information. A child will either reject accepting or investigating it or will accept it and try to learn more about it.

He believes that all concepts have different characteristics. Some may be appealing and inviting to certain children; however, to other children they won't be appealing. A few of those things that will influence whether or not a child will want to accept and learn new concepts are; the experiences the child has had of the world and himself, and the child's controls and defenses. He has also indicated that "cognitive controls have been postulated by workers as mechanisms that determine the amount and organizations of information which becomes available to an individual as he attempts to adapt to and handle confrontations from his environment." (47, p. 359)

Piaget (44) has done extensive studies of intellectual development over the past several decades. His theory suggests that the child progresses through a series of stages in intellectual development. At each stage the child interacts with his environment through the processes of assimilation and accommodation. Assimilation is where the child relates what he perceives in associating it with his present knowledge and understanding. Accommodation is where the child adjusts his conceptual understanding to fit along with the new perceptions.

Piaget (44) is concerned with the stages of maturation, experience, social transmission, and self-regulation in the development of the child. Piaget feels that the intelligence is the ability to adapt to the environment that which surrounds us and the development

goes through a series of maturational stages. There are two major stages in intellectual development. They are; 1) sensorimotor and 2) conceptual intelligence. In sensorimotor stage, a child at birth until two years of age adapts to the environment without extensive use of symbols or language. In conceptual stage, a child from two to maturity is capable of reasoning about events mentally without experiencing the event he is thinking about.

Hunt (32) discusses Piaget's developmental theories. He points out that according to Piaget:

> The rate of development is in substantial part, but certainly not wholly, a function of environmental circumstances. Change in circumstances is required to force the accommodate modifications of schemata that constitute development. Thus, the greater the variety of situations to which the child must accommodate his behavioral structures, the more differentiated and mobile they become. Thus, the more new things a child has seen and the more he has heard, the more things he is interested in seeing and hearing. Moreover, the more variation in reality with which he has coped, the greater is his capacity for coping. (32, p. 258-259)

Hunt (32) also suggests that the early years of development play a significant role in providing the generalized conceptual skills needed for later learning. There is a need to provide environmental enrichment activities that are matched to the child's developmental level at each stage.

Deutsch (15) and Hunt (32) are in agreement that cognitive development is very important with pre-school children and that

there are various developmental steps that a child must go through in order to learn new concepts. Before a child actually comes in contact with an idea or an object, there are many factors that will influence the learning ability of this child. Children of different socio-economic groups vary in their abilities to learn new ideas. The home environment and atmosphere contribute to a large degree how effective a child will learn. Deutsch and Hunt are interested in the situations confronting pre-school children as they enter school and begin trying to understand and learn new concepts.

Deutsch (15) asks if a pre-school child entering a nursery school is intellectually and psychologically ready for the school experience, for the specific curriculum, and is actually ready for the demands of comprehension, motor control, communication, and sociability made by the school. Have the parents prepared these children and made them aware of the school curriculum, purpose, demands, and meaningful role that education and learning can play in the life of a child? "I do think that the sense of failure that often develops at an early stage projects itself through the total experiences of the child, not only temporally, in terms of his reaction to the demands of the school, but also in terms of his whole concept of self-identification, of a positive self-concept, of the development of a sense of dignity." (15, p. 22-23) He also states that pre-school children who have had a variety of experiences and

have been encouraged by their parents to investigate and explore new things will have an advantage over those children who haven't had stimulating experiences and whose parents either aren't capable or who don't care about encouraging their children to succeed. "Massive evidence makes it clear that a child's social experience is very influential in his development." (15, p. 73)

Deutsch (15) believes that pre-school children need to have a good foundation of learned experiences and a stimulating environment suggesting improvement and accomplishment. Children who have such a constellation of experiences are able to progress and learn more rapidly and more effectively than those who do not have such a ground work. A child learning a concept must go through processes that include intelligence, thinking, interest, motivation, stimulation from environment, and association with past experiences.

Montessori (42) in working with the children in slum areas found that in teaching and helping children to learn new concepts, the environment should be warm and stimulating and the children should feel free to explore and investigate. The children should be motivated, privileged, and capable of reasoning and teaching themselves in any learning atmosphere. The environment should be more in tune with the child's size, freedom of activity should be encouraged, materials for learning should be stimulating, and the children to be left alone to pursue their own interests and exploration. She is known for her

sensory training and the utilization of symthetic intellectual functions in concept development. The children practiced their sensory discrimination of different stimuli from simple to more difficult and attempted to use as many of the senses as possible. A child would learn about an object and learn all of the characteristics of such an object. Activities were introduced for development of touch, color, thermal and auditory sense. Children were encouraged to talk -- words were used to convey a concept. The degree of difficulty of learning a new concept was arranged for the child according to his own individual interests according to his stage of development and level of ability.

Montessori (42) set the environment in the classroom so that the children would investigate and explore by themselves and the teachers moved among them unnoticed, guiding and encouraging them individually, but not interrupting or interfering only when they positively needed help.

Miel (58) describes learning a concept as trying to understand it through past memories, images and ideas and to associate these that a child is familiar with, with the new concept. A child is formulating a framework of new experiences with his past experiences to help him build a foundation for understanding and interpreting new information and experiences. He also states that a pre-school child may want to learn a new concept through sensory experiences.

He will touch and feel an object, thereby discovering its size, shape, texture, color, weight, and its purpose. This child is then better able to form some concept in his mind with which he is familiar, through his ideas, images, understanding, and past experiences. In this way, the child is able to use his past experiences in acquiring new insights from his present experiences.

Interest and Motivation

Kuder and Paulson (36) agree that a child has to have some motivation or interest to support his wanting to learn a new idea. Interest in learning is a way of feeling or a frame of mind. A child has an interest in an activity when he finds it satisfying, when he enjoys doing it and investigating it, when he talks about it, and when he tries to do his best at it. If a child finds it interesting, he will usually want to interact with this new thing and find out more about it. Most children have many interests of varying strength and the interest level of each child is dependent on a child's maturity.

They also agree that a child's interest level is influenced by his environment and to a degree by his ability. Children become interested in concepts if the concepts themselves invite and arouse curiosity in the child, if his environment is stimulating, and the child himself has to have the desire to explore this new idea either from past experiences or curiosity itself.

Eriksson (23) believes that creating real motivation in children is one of the hardest tasks a teacher has in teaching children. Many believe that motivation is only getting them interested at the beginning of a lesson and that is as far as it goes. But, real motivation is like lighting a spark that will in turn arouse a response in the children's minds which will lead to a sustained interest in the direction desired by the teacher.

In addition, Eriksson (23) says also that every child has inner needs and desires and these can be easily stimulated. A child is exposed to many activities, but he may have an interest in only a few. How can a child become interested in learning a new concept? This child must be old enough or mature enough to understand and comprehend what it is through recognition and experience. The environment has to be comfortable to the child and he should have confidence in himself to explore and investigate. If there is an adult introducing this new concept, the adult should show warmth, understanding, sincerity, and encouragement toward the child or children learning. The adult should make it as simple as possible and should talk on the child's level of understanding. He should encourage participation and interaction and show praise and accomplishment for what the child does. Interests of children change with maturity -- what might be interesting to one child may not be interesting to another.

White (59) in dealing with motivation concerning learning a concept relates that motivation needed to attain concepts cannot wholly be derived from sources of energy such as drives or instincts but that there needs to be a different kind of motivation in dealing with the environment which people do not gain at birth nor simply through maturation. There is no longer any reason to believe that the primary drives cause motivation. People do have a tendency to explore and investigate the surroundings and, therefore, learn from it even though their basic drives were satisfied. Children gaining motivation toward learning a new concept would perceive such an idea, explore and investigate it, interact with it, and have a curiosity to know more about it. He states that dealing with the environment is the most fundamental element in motivation. Motivation is stimulated by a continuous chain of events which is interacted through environment. Exploration, activity, and manipulation are the three new drives in which motivation is attained. White feels that strong motivation reinforces learning in a narrow sphere and limits the learning, whereas moderate motivation is much more conducive to an exploratory and experimental attitude which involves better interaction in general. A steady, persistent interaction with the concept will create interest, motivation, curiosity, and exploration and arouse further investigation.

Bloom, Davis, and Hess (8) agree that every human being has basic needs which must be satisfied in order for people to perform his higher-level functions. Children have certain needs and these basic needs operate to influence learning in many ways. A child's environment is a determining factor in whether or not these needs are filled, consequently, affecting the learning procedure of this child. A child's intelligence and learning ability is influenced by his home environment and experiences. "For the most part, it is the adults in the home who serve to stimulate the child's intellectual development." (8, p. 12) These same authors state that early in life, a child is able to perceive many aspects of life and the surrounding world. This perceptual development takes place through sensory activity such as vision, hearing, touch, smell, and taste. A child learns to go from simple to more complex tasks. Perceptual development grows through experiences stimulated by the environment. Linguistic development is linked together with the perceptual development of a child. As the child comes to perceive the world about him, he is able to understand and fix objects and events in his mind as he hears and learns that these objects have words attached to them. As a child's language develops, he is able to communicate better, to perceive more, and through the use of words, he can express his ideas, thoughts, emotions, intentions and desires.

Bloom, Davis and Hess (8) believe, too, that a child should learn how to learn. Children coming from different home environments have different abilities and varied learning abilities. Adults should talk with children about concepts and talk with a child while he is learning. Adults should allow discovery and exploration within the child as he is learning, but should talk and explain, motivate, encourage and reward children as they are learning. Children should be helped in seeing the rewards of learning not only for the present, but also know how important learning and knowledge will be in the future. Children should gain a desire to learn and gain new knowledge.

Jersild (35) states that what a child likes to do is usually influenced by what opportunities have been offered him and through these opportunities, he has learned to enjoy doing certain ones. Along with these opportunities offered him, he must also have the ability to make use of them. Regardless of these opportunities, children's interests will naturally change as they become older and as they become intellectually and emotionally mature.

Bereiter and Engelmann (6) in working with disadvantaged children feel that language is very important in concept learning since it provides the tools by which to identify the objects. A pre-school child will probably have somewhat of a limited language usage, but he can still understand through patience and explanation

on the part of the teacher. There should be a communication between child and teacher even though the pre-school child hasn't a large vocabulary or usage of too many sentences. "Language, if it is to be adequate in the teaching situation, must be capable of standing for reality. It must be capable of creating a verbal description of reality which may be treated as if it were reality." (6, p. 124) Language is therefore a process by which teacher and child communicate, understand, and explain ideas. Without this communication, it would be hard to learn these new concepts.

Bereiter and Engelmann (6) stress that language and concept learning is a process through which children learn by repetition and feedback from teacher to child and then child back to teacher. Language must be capable of standing for reality and must be understandable. The basic teaching method is a pattern drill set around a supercharged verbal environment with the teacher playing a forceful role, placing herself as the pivotal figure in the verbal interactions. The program is very structured and is conducted in a business like manner. There are usually study groups of fifteen children with three teachers operating two hours a day, five days a week for an academic year. One hour is devoted to intensive, direct instruction and one hour for a semistructured period. The teaching schedule calls for three twenty-minute study periods in

which the teacher asks the children questions using sentences. The children are then required to answer back in sentences and to speak very loudly and clearly. Those children who do well are rewarded with such things as a cookie or those who rebel are punished in some way such as withdrawing a child from the group, isolating a child in a room, not receiving a reward of a cookie, and light physical punishment in the form of a slap or good shaking. The teachers try to teach in groups and spend as little time as possible with individual help. If individual help is needed, then the individual help should not last longer than thirty seconds.

Foreign Language Learning

Foreign languages in the United States have existed ever since immigrants from foreign countries immigrated here. In colonial times, there were so many foreigners that foreign languages were taught in the schools and tutors were plentiful.

Dunkel (19) states:

> The learning and teaching of foreign languages has been talked about for at least two thousand years, and the actual activity has probably been carried on for many millions more. Yet, in spite of all this experience, styles in language teaching have continually changed within the last century with almost the same rapidity as those in women's hats. (19, p.2)

Dunkel (19) agrees that as long as foreign languages have been taught in our society, there have always been learned men and those

experimenting who have evaluated and tested many teaching methods and have devised new and better ways. Not only have these men invented new ways of teaching, but they have experimented on teaching languages to different age groups and have made different conclusions to which age is the best for learning a foreign language.

Huebener (29) states that we cannot wait until the child becomes an adult. The best time, psychologically and educationally, to learn a foreign language, is during childhood and youth. The start must be made at an early age if a firm foundation is to be made and that learning a foreign language is not only a cultural luxury and a practical necessity, but it is also important in business, in travel, in research and in Foreign Service. It is also needed for cultural exchange, for international understanding, and above all -- for peace.

"Several conferees at the meeting of the Modern Language Association of America in 1956 held that ideally the best time to start the teaching of foreign languages is at birth. But since the school has no control over these early years, age four was selected as the recommended time to begin a second language." (56, p. 20)

Brooks (9) believes that many children whose parents are from foreign countries and who speak a foreign language in their home, are able to speak two languages very fluently. When these young children speak either of the two languages, they speak them so well

that there is barely a detectable accent. He also states that bilingualism implies the presence in the same nervous system of two parallel, but separate, patterns of verbal behavior. These would include vocabulary, sentence structure, phonology, and the meanings of such work together but are distinct inner processes that may work together without affecting the other language. Learning one language and then another will not affect or hinder either language. These children hear and try saying these foreign words at an early age and through hearing them, imitating, and copying, they are able to pick these words up just as easily as their native language. In addition, he mentions many ways in which to teach a foreign language. A few of the modern ways are:

1. To not associate a foreign language with the native language.
2. Talk in the foreign language using audio-visual aids.
3. To sing in the foreign language.
4. Memorize a dialogue.
5. Repeat sentence patterns.
6. Memorize vocabulary in context.

Alkonis and Brophy (1) agree that there are many methods of teaching a foreign language and a few have been proven more successful than others. Those methods that are now showing the most results should definitely be used in a teaching situation. Experiments

and research show that the best time to learn a foreign language is when children are young. They also comment that after more than three years of studying reports on teaching foreign languages in the elementary grades, they very highly recommend teaching the children at an early age. The teachers, administration and parents should work closely together. Introducing a second language to children at an age when they are naturally curious about language, when they have fewest inhibitions, and when they imitate most easily these new sounds and sound patterns, is highly recommended. Real proficiency in the use of a foreign language requires progressive learning over a period of time which would mean that the earliest possible age would be the best time for learning a foreign language.

FINDINGS AND CONCLUSIONS

Findings

The hypotheses were that the singing of a German song, flannel-board story and conversation would, in that order, sustain the interest of the pre-school group most effectively. The results showed that there was not statistically a significant difference at the .05 level. The findings do not support the hypotheses in that they show that the flannel-board story sustained the interest of the group best, next the singing of a German song, and the least effective was conversation in German. It should be noted, however, that the statistical values obtained were in the direction of the hypothesis at the end of the experiment.

The data collected show that as each method was performed, each lasting ten minutes, the children's interest dropped towards the latter part of the ten minutes showing that the method was of maximum duration in that particular situation and more than ten minutes for each method would be too long to completely hold their interest using the methods as they were used.

The first time the conversation method was presented, 69 per cent of the children were obviously interested and 31 per cent were passive. The third time it was presented, 37 per cent were interested and 63 per cent passive. This might suggest that conversation, being

the first method of introducing German to the children, might have been something new to them and more of a novelty, and as something which was initially of greater interest than latter was true.

The first time the group sang the German song, 47 per cent were obviously interested and 53 per cent were passive. The third time the song was sung, 93 per cent were obviously interested and seven per cent were passive. There was a large increase of interest, from 47 per cent obviously interested the first time the group sang the German song to 93 per cent obviously interested the third time it was performed. This might suggest that after the children learned the song, they gained more interest in participating in the singing and perhaps if the experiment had continued for a longer time, the incline of interest of the children might have changed the findings to indicate that singing songs sustained the children's interest best of the three methods used in this study.

The first time the flannel-board story in German was told, 74 per cent were obviously interested and 26 per cent passive. The third time, there were 68 per cent obviously interested and 32 per cent passive. The flannel-board story sustained the interest of the children about the same for all three times the method was performed.

An average of the three times that the conversation method was performed indicated that 20 per cent of the boys were interested and

80 per cent were passive. Of the girls, 80 per cent were interested and only 20 per cent were passive.

An average of the boys while singing the German song showed that 50 per cent were interested where 70 per cent of the girls were interested.

An average of the boys during the flannel-board story showed that 80 per cent were interested and 60 per cent of the girls. There appears, therefore, to be a difference in the interest-responses of boys and girls. Each method apparently appealed more to children of one sex more than to the other.

Tables 1, 2, and 3 on the following pages contain the summarized results of the twenty children involved in the three methods of conversation, singing, and a flannel-board story. They contain the individual scores for each of the three ratings and the mean scores of each child for the three ratings. A mean score for each individual child for the combined three ratings was calculated by totaling the scores for each of the three methods for each child and dividing by three to get an average. The mean score for the group of twenty children in each teaching method or rating was then calculated by totaling the numbers for each child in each rating and dividing by twenty to get the average score for each method of teaching. The average mean for the twenty children was calculated by totaling the twenty individual child means and dividing by twenty to get the average score for the total number of children.

It may be observed that there is very little difference among the three average means for the twenty children. Table 1 indicates an average mean score for the conversation method of 19.4, Table 2 indicates a mean score for the German song of 20.2, and Table 3 indicates a mean score for the flannel-board story of 20.7.

Table 1 indicates that the interest of the children decreased each time the conversation method was performed. Table 2 indicates that interest in singing the German song increased at the end of the study. Table 3 indicates the interest decreased only slightly in telling the flannel-board story.

The data in these three tables, while not statistically significant, do suggest the possibility that of the three methods employed in the study, that method which might sustain the children's interest best over a longer period of time which was used in this study, could be the singing of a German song.

Table 4 contains data in which is summarized the results of the Analysis of Variance Test. The table indicates for each of the three methods performed, the calculation of the method totals and means and the trial totals and means. Since the F ratio (0.611) is less than 1.000 indicating no statistical significance at the .05 level, this would indicate that the method mean scores of 19.4, 20.1, and 20.7 happened by chance.

Table 1. Conversation

Child	First Ratings	Second Ratings	Third Ratings	Mean Score
1	3,3,3,3,3,3,3,2	3,3,3,3,3,3,3,2	3,3,3,3,1,1,1,3	21.0
2	2,3,2,2,2,2,2,2	3,3,2,3,2,2,2,2	2,3,3,2,3,2,2,2	18.3
3	2,2,2,3,1,1,2,1	3,2,2,3,3,3,2,2	3,3,3,2,2,2,2,2	17.8
4	3,2,2,2,3,2,2,2	3,3,2,3,2,2,2,2	3,3,2,2,2,2,2,2	18.3
5	3,2,2,3,3,3,2,3	3,2,2,3,2,2,2,2	3,3,3,3,3,2,2,2	20.0
6	3,2,2,1,2,2,2,2	3,2,3,2,2,2,2,2	3,2,3,2,2,2,3,3	18.0
7	3,3,3,3,3,3,3,2	3,3,2,3,3,2,2,2	2,3,3,2,2,2,2,2	20.3
8	3,3,3,3,3,2,2,2	3,3,3,3,2,3,2,3	3,3,3,3,3,3,3,3	22.3
9	3,3,3,3,3,2,2,2	3,2,2,2,2,2,2,2	3,3,3,3,2,2,1,1	18.7
10	3,3,3,3,2,2,1,2	3,2,3,3,3,3,2,2	Absent	20.0
11	3,2,2,2,2,2,2,2	3,3,2,2,2,2,2,2	3,2,2,2,2,2,2,2	17.3
12	3,3,3,3,3,3,3,3	3,3,3,3,2,2,2,2	3,3,3,2,2,2,2,1	20.7
13	3,3,3,3,3,3,2,2	3,3,3,3,3,3,3,3	3,3,3,3,2,1,2,2	21.7
14	3,3,2,2,2,2,2,2	3,3,3,2,3,3,2,2	1,3,1,1,1,1,1,1	16.3
15	3,3,3,3,3,3,3,3	3,3,3,3,2,3,2,3	3,3,2,3,3,3,2,2	22.3
16	3,3,3,3,3,3,3,2	3,1,1,1,1,1,2,1	3,3,3,1,1,2,2,2	17.0
17	Absent	3,3,2,3,2,2,2,2	3,3,3,2,2,2,2,2	19.0
18	3,3,3,3,3,3,2,2	2,3,2,2,3,2,3,2	2,3,3,2,2,2,2,3	20.0
19	3,3,3,3,3,3,2,2	3,3,3,3,3,3,2,3	3,3,3,3,2,2,2,2	21.7
20	3,3,3,3,3,2,2,2	3,3,1,1,1,1,1,2	3,2,2,2,3,2,2,2	17.3
Mean Scores:	20.3	19.4	18.5	
Average Mean of the Twenty Children				19.4

Table 2. Songs

Child	First Ratings	Second Ratings	Third Ratings	Mean Score
1	Absent	3,3,2,3,3,3,3,3	3,3,3,3,3,3,3,3	23.5
2	3,3,2,2,2,2,2,2	3,2,2,3,2,2,2,2	3,3,2,3,3,2,2,2	18.7
3	3,3,2,2,3,2,2,2	2,3,2,3,2,2,2,3	3,2,2,3,3,3,2,2	19.3
4	3,3,3,2,2,3,2,2	Absent	Absent	20.0
5	2,3,2,2,2,1,2,2	2,2,3,2,2,2,2,2	3,3,3,3,3,3,3,2	18.7
6	3,3,3,3,2,3,3,3	3,3,3,2,3,3,2,3	Absent	22.5
7	Absent	3,3,2,2,2,2,2,3	3,3,3,3,3,2,3,2	20.5
8	3,3,2,2,2,2,2,2	3,3,2,2,2,2,2,3	Absent	18.5
9	2,2,2,2,2,2,2,1	2,2,2,2,2,2,2,2	2,3,3,2,2,2,2,2	16.3
10	2,2,2,2,3,2,2,2	2,3,2,2,2,2,2,3	3,2,2,3,3,3,2,3	18.7
11	2,2,3,3,3,2,2,2	3,3,2,2,2,2,2,2	3,3,3,3,3,2,2,2	19.3
12	2,3,3,3,3,3,2,2	3,3,2,3,3,3,3,2	3,3,3,3,2,3,3,3	22.0
13	2,3,3,3,3,2,2,2	3,2,3,2,3,3,3,3	3,3,3,3,3,3,2,3	21.7
14	2,2,3,2,2,3,3,3	2,2,2,1,3,3,3,3	3,1,3,3,3,3,2,3	20.0
15	2,3,3,3,3,3,2,2	3,3,3,3,3,3,3,3	Absent	22.5
16	3,2,3,3,3,3,3,2	1,1,3,1,1,3,3,1	3,3,3,3,3,3,3,3	20.0
17	Absent	3,3,3,2,2,2,2,2	3,3,3,3,3,3,3,3	21.5
18	3,3,3,2,2,2,2,2	3,3,3,2,2,2,2,2	3,3,3,3,3,3,3,2	20.3
19	2,2,3,2,2,2,2,2	3,2,2,1,2,2,2,2	3,3,3,3,3,3,3,3	19.0
20	2,3,3,3,2,3,3,2	2,2,3,2,2,2,3,2	3,3,3,3,3,3,2,3	20.7
Mean Scores:	19.2	19.0	22.1	
Average Mean of the Twenty Children				20.2

Table 3. Flannel-Board Story

Child	First Ratings	Second Ratings	Third Ratings	Mean Score
1	3,3,3,3,3,2,2,3	3,3,3,3,2,2,3,3	3,3,3,3,3,2,3,2	22.0
2	3,3,3,3,3,3,2,3	3,3,3,3,3,3,2,2	2,3,2,2,2,2,2,1	20.3
3	2,3,2,2,3,3,2,2	Absent	3,3,3,2,3,3,2,1	19.5
4	3,3,2,3,2,3,2,2	3,3,3,3,2,3,2,2	Absent	20.5
5	2,3,3,3,3,2,3,3	3,3,3,3,3,3,3,3	3,2,2,2,1,2,1,1	20.0
6	Absent	3,3,3,3,3,3,3,3	3,3,3,3,3,3,1,2	23.0
7	3,3,3,3,3,3,2,2	3,3,3,3,1,1,2,1	3,3,3,2,2,2,2,3	19.7
8	3,3,3,3,3,3,2,3	3,3,3,2,3,1,1,3	3,3,3,3,2,2,2,2	20.7
9	3,3,3,3,3,2,3,3	3,2,2,2,2,2,1,1	3,3,3,3,2,2,2,2	19.3
10	3,3,3,3,3,3,3,3	3,3,3,3,3,3,1,1	3,3,2,3,2,2,2,2	21.0
11	3,3,3,2,2,1,2,2	3,3,3,2,2,3,2,2	3,2,2,2,2,2,2,3	18.7
12	3,2,3,2,2,2,2,1	3,3,2,3,2,2,3,2	2,3,2,2,2,2,2,2	18.0
13	3,3,2,2,2,2,3,3	3,3,3,3,3,3,2,2	2,3,2,2,3,3,2,2	20.3
14	3,3,3,3,3,3,3,3	3,3,3,3,2,2,2,1	3,3,3,3,2,2,3,2	21.3
15	3,3,3,3,3,3,3,3	3,3,3,3,2,2,2,2	3,3,3,3,3,3,3,3	22.7
16	3,3,3,3,3,3,3,2	3,3,3,2,3,3,3,3	3,3,3,3,2,3,3,3	23.0
17	2,3,3,3,3,3,2,2	3,3,3,3,2,2,2,3	3,3,3,2,2,2,3,2	20.7
18	3,2,2,2,2,2,2,2	3,3,3,3,3,2,2,3	3,3,3,3,2,2,2,2	19.7
19	3,3,3,3,3,3,3,3	Absent	3,3,3,2,3,3,3,3	23.5
20	3,3,2,2,2,2,2,2	3,3,3,3,2,2,3,2	3,3,3,2,2,2,3,3	20.0
Mean Scores:	21.3	20.7	20.0	
Average Mean of the Twenty Children				20.7

Table 4. Analysis of Variance

Methods	Trial 1	Trial 2	Trial 3	Method Totals	Method Means
Conversation	20.3	19.4	18.5	58.2	19.4
Songs	19.2	19.0	22.1	60.3	20.1
Flannel Board	21.3	20.7	20.0	62.0	20.7
Trial Totals	60.8	59.1	60.6	180.5	

	Degree of Freedom	Mean Square	F Ratio
Trials	2	0.28775	
Methods	2	1.20775	0.611
Experiment Error	4	1.9778	
Total	8		

Conclusions

1. Femininity and masculinity appear to influence the responses of children to a language learning situation.

2. That method which will best sustain children's interest in a language-learning situation appears to be dependent on where the children are in their familiarity with the language.

3. That method which best enables the child to develop his response or capacity to participate will best promote his interest in the activity.

SUMMARY OF THESIS

A pre-school child, three or four years of age, is just starting out in life and will be confronted with new problems every day. Among the problems facing the child will be the learning of new concepts. The way in which a particular child learns new ideas will be influential on the growth and development of the child. Each child has been born with a certain potential for the development of reasoning, thinking, perceiving, and associating new information with the knowledge gained since birth as he proceeds to learn increasingly complex concepts. The environment around a child is important and is a substantial influence in the learning process.

A child learning new concepts goes through a developmental process of increasingly complex stages. In learning new concepts, a child must go through various processes of thinking. It involves a sequence of ideas moving from some beginning, through some sort of pattern of relationship, past experiences and associating what he is now experiencing with that which he has already experienced.

To illustrate that learning is based on association, an example is given of a nursery school situation: In the Child Development Laboratory at Utah State University with a group of pre-school children, there was an incubator with newborn chickens in it, and

over them was a light. A little nursery school child asked the teacher why the light was in the incubator. The teacher answered by explaining that the light was there to keep the chickens warm. The puzzled child asked the teacher if the chickens' feathers kept them warm. The teacher replied that the feathers were for warmth for the chickens, but also the light gave them warmth. The child was still puzzled until the teacher explained that the light was the same as when the child's mother took his little brother outside and the mother must cover the baby up in a blanket even though the baby was dressed. The child was able to see and understand only when he could associate the light in the incubator which was for additional warmth with the blanket giving the child's brother more warmth. He had to associate the incubator incident with something he was familiar with before being able to understand this which was new to him.

Materials of thinking would be such things as sensations, perceptions, memories, images, concepts, feelings, needs, attitudes, habits, and the capacity of organizing these into thoughts and thinking. As a child perceives a new concept, he should be motivated and interested in wanting to learn more about it. The environment should be stimulating and if teachers or other people are attempting to influence him to learn, they should try to instill in him a sense of security that they know him, like him, are concerned

for him, and appreciate his individuality, so he can feel free to explore and investigate new ventures without fear of failure, censorship, or adult disapproval. An adult or teacher should try to understand the child and gain a feeling of closeness in order to obtain trust and confidence in the child for the teacher. There should be love and warmth shown toward the child so as to encourage him to investigate, explore and feel good about interacting with ideas, materials and experiences to form new understanding.

Concept formation and learning development should and must start in the early pre-school years in order for the child to achieve at his maximum potential. Children should be encouraged to investigate and explore new things. In the case of learning about a new object, a child should learn about its size, shape, texture, color, weight, and various parts, and will learn by associating this new knowledge with his past experiences and put these together in a constellation of thoughts and ideas. By associating the new knowledge with his present knowledge, he is able to form new ideas and therefore associate and learn new concepts.

One concept that many pre-school children may be introduced to is learning a foreign language. More and more the American people are realizing how important it is to teach their children languages, and especially at an early age. Language learning is important in many different ways in our society today. Data have proven that the

best time to learn a foreign language is at an early age -- the ideal age being four years old.

There are many different methods of teaching children a foreign language and a few are better for teaching and learning a language than others.

This study has not been undertaken to try and find out which method is the best for teaching pre-school children, but the experimenter would like to do further research on teaching children a foreign language through different teaching methods and try to determine which method would be the best as far as actually comprehending, understanding, and learning a foreign language is concerned. The first stage of this venture was to investigate the effectiveness of different approaches in sustaining interest of pre-school children in a language-learning or teaching situation.

The purpose of the study was mainly to find out which teaching method would sustain the interest of the children most fully and, therefore, which method might be the most effective in teaching children a foreign language.

The study seems to indicate that a method which does not provide opportunity for involvement and rapid development of ability to participate, does not effectively sustain the child's interest. Flannel-board stories sustain interest, but development of interest does not take place in a way comparable to that achieved by the

singing of songs in the new language. Apparently, participation is vital to the development of interest.

DISCUSSION AND RECOMMENDATIONS FOR FURTHER STUDY

Discussion

The hypotheses were not supported in the study. The flannel-board story sustained the interest of the group best, perhaps because children like stories and there were colorful figures put on the flannel board to help the children follow the story even though they were unable to comprehend the actual words. The writer also used facial and body expressions as he told the story which might have helped to sustain the interest of the children.

As the writer told the story in German, he used and put the colored figures relating to the story on the flannel board and even though the children could not understand the words, they were able to watch the characters being put on the flannel board along with expressions given to the story by the writer which perhaps helped to sustain the interest. The group's interest was sustained about the same for all three times the method was performed.

The singing of the German song held the children's interest, but not quite as well as the flannel-board story. The writer sang the German song to the group and then had them learn and sing with him. He did have a few audio-visual aids that he held up and showed the group as they sang the song. For example, as the group sang about a fir tree, the writer help up a colored picture of a fir

tree and so on during the singing of the song.

There was not as much participation and interest shown the first time the group sang because they did not know the words, but the second and third time they began picking up and learning the words and attempting to sing along. The last time the group sang the song, the majority of children were quite familiar and had learned the words to the song. The children did participate and showed greater interest than initially was true.

There was a large increase of interest shown from the first time they sang to the third and final time. After they had learned the words to the song, they enjoyed singing the song. Perhaps if the experiment had lasted or continued for a longer period of time, the singing of songs might have sustained the interest of the children best.

Conversation illicited enthusiastic interest the first time; however, the children lost interest the second and third times it was presented. Perhaps the reason for interest the first time was the newness, but the novelty apparently wore off during the successive two attempts. The girls, on an average, showed greater interest and the reason perhaps being that girls are a little more mature and have greater verbal capacity than boys at this age and consequently their interest span would be more developed.

As the three methods were performed, the girls responded much better toward the singing of the German song and the conversation method than did the boys; however, during the flannel-board story, the boys showed more interest than the girls. It is possible that the boys responded better because the flannel board involved more action, thereby appealing to their masculinity, such as putting the figures on the flannel board and facial gestures used by the experimenter.

Each teaching method had a varied number of German words. The conversation contained seven German words: Guten Morgen (Good Morning), Ich heisse (My name is), and Wie heisst du (What is your name). The German song contained thirty-two German words. The song was entitled "O Tannenbaum". The flannel-board story consisted of over fifty words telling of a group of children planting and watching their own garden grow. Perhaps because each method had a different number of German words might be a possible variable influencing the interest of the children with each teaching method. The more words used might arouse more curiosity and interest within the children.

The experimenter tried to hold the group together by himself without the help of any of the other teachers. This was very difficult for him to do especially as the experiment approached the end because he was conducting the experiment and trying to control the children as well. If the experimenter would have had two or three

supporting teachers there among the children who could have helped children become interested and helped with discipline when necessary, perhaps the children might have become more involved and been more interested in each teaching method.

The experimenter has been able to see the importance of supporting teachers and their significance in the role of teaching while working with pre-school children in the nursery school laboratory. The role of the supporting teacher is as important as the teacher himself and support from them is important in controlling the children, encouraging participation, interest, and creating motivation. Certainly, it would have been easier to conduct the experiment if some other teachers had actually participated in the role of supporting teachers. However, to have done so might have changed the nature of the findings in ways which are not known, or not revealed by this particular study.

Recommendations For Further Study

In further experimental studies of teaching pre-school children a foreign language, it is recommended that:

1. A smaller group of children be used so there could be better personal contact between teacher and children.

2. More than just the experimenter shall teach the group a language. Devise methods of using others who know the language and can participate with the children.

3. In a group of twenty children, it is difficult for only the experimenter to control all twenty children. Instead of having only the four teachers as the raters and only the experimenter trying to control the group, there might be additional teachers who could sit with the group and help supervise and control the children.

4. The experimenting might be for varying periods of time to determine that which is best.

5. A study might be performed by having a lady as the experimenter to determine if this might have an influence on the comparative responses of the boys and the girls.

6. The experiment might be continued over a longer period of time to determine if singing of a German song would sustain the interest of the children better than the flannel-board story.

LITERATURE CITED

(1) Alkonis, Nancy V., and Brophy, Mary A., "A Survey of FLES Practices," Reports of Surveys and Studies in the Teaching of Modern Foreign Languages, Modern Language Association of America, New York, 1959-1961.

(2) Almy, Millie, Child Development, Henry Holt and Company, New York, 1955.

(3) Almy, Millie, Young Children's Thinking, Teachers' College Press, Teachers' College, Columbia University, New York, 1966.

(4) Andersson, Theodore, The Teaching of Foreign Languages in The Elementary School, D. C. Heath and Company, Boston, Massachusetts, 1953.

(5) Battin, Ray R., and Haug, Olaf C., Speech and Language Delay, Charles C. Thomas Publisher, Springfield, Illinois, 1964.

(6) Bereiter, Carl, and Engelmann, Siegfried, Teaching Disadvantaged Children in the Preschool, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1966.

(7) Bloom, Benjamin S., Stability and Change in Human Characteristics, John Wiley and Sons, Inc., New York, 1965.

(8) Bloom, Benjamin S., Davis, Alison and Hess, Robert, Compensatory Education For Cultural Deprivation, Holt, Rinehart and Winston, Inc., New York, 1965.

(9) Brooks, Nelson, Language and Language Learning, Harcourt, Brace and World, Inc., New York, 1964.

(10) Bruner, Jerome S., "The Course of Cognitive Growth", Human Development - Selected Readings, Haimowitz and Haimowitz, Thomas Y. Crowell Company, New York, 1966.

(11) Bruner, Jerome S., Goodnow, Jacqueline J., and Austin, George A., A Study of Thinking, John Wiley and Sons, Inc., New York, 1962.

(12) Childers, Wesley J., Foreign Language Teaching, The Center For Applied Research in Education, Inc., New York, 1964.

(13) Coleman, Algernon, The Teaching of Modern Foreign Languages In The United States, The Macmillan Company, New York, 1929.

(14) Cornelius, Edwin T. Jr., Language Teaching, Thomas Y. Crowell Company, New York, 1953.

(15) Deutsch, Martin, "Facilitating Development in The Pre-School Child: Social and Psychological Perspectives". In Fred M. Hechinger, Pre-School Education Today, Doubleday and Company, Inc., New York, 1966.

(16) Die Mutter Schule - Brief Nr. 1, Die Familie, Max Hueber Verlag, Muenchen, Deutschland, 1959.

(17) Die Mutter Schule - Brief Nr. 2, Unsere Wohnung, Max Hueber Verlag, Muenchen, Deutschland, 1959.

(18) Die Mutter Schule - Brief Nr. 3, Erwachen und Aufstehen, Max Hueber Verlag, Muenchen, Deutschland, 1959.

(19) Dunkel, Harold B., Second-Language Learning, Ginn and Company, Boston, Massachusetts, 1948.

(20) Emig, Janet A., Fleming, James T., and Popp, Helen M., Language and Learning, Harcourt, Brace and World, Inc., New York, 1966.

(21) English, Horace B., Dynamics of Child Development, Holt, Rinehart and Winston, Inc., New York, 1961.

(22) "Equipment and Supplies", Project Head Start, Office of Economic Opportunity, Washington, D. C.

(23) Eriksson, Marguerite, Forest, Ilse, and Hulhauser, Ruth, Foreign Languages in The Elementary School, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1964.

(24) Fowler, William, "Concept Learning in Early Childhood", Young Children, 21(2):81-91, 1965.

(25) Freud, Sigmund, The Ego and The Id, W. W. Norton Company, Inc., New York, 1961.

(26) Handschin, Charles H., Modern-Language Teaching, World Book Company, New York, 1940.

(27) Harvey, O. J., Hunt, David E., and Schroder, Harold M., Conceptual Systems and Personality Organization, John Wiley and Sons, Inc., New York, 1961.

(28) Hechinger, Fred M., Pre-School Education Today, Doubleday and Company, Inc., New York, 1966.

(29) Huebener, Theodore, Why Johnny Should Learn Foreign Language, Chilton Company, Philadelphia, Pennsylvania, 1961.

(30) Hunt, Earl B., Concept Learning, John Wiley and Sons, Inc., New York, 1962.

(31) Hunt, J. McVicker, Intelligence and Experience, Ronald Press Company, New York, 1961.

(32) Hunt, J. McVicker, "The Psychological Basis For Using Pre-School Enrichment as an Antidote For Cultural Deprivation". In Fred M. Hechinger, Pre-School Education Today, Doubleday and Company, Inc., New York, 1966.

(33) Hymes, James L. Jr., Behavior and Misbehavior, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1965.

(34) Ilg, Frances L., and Ames, Louise Bates, The Gesell Institute's Child Behavior, Dell Publishing Company, Inc., New York, 1962.

(35) Jersild, Arthur T., and Tasch, Ruth J., Children's Interests, Bureau of Publications Teachers' College, Columbia University, New York, 1949.

(36) Kuder, Frederic and Paulson, Blanche B., Exploring Children's Interests, Science Research Associates, Inc., Chicago, Illinois, 1954.

(37) Lado, Robert, Language Teaching, McGraw-Hill, Inc., New York, 1964.

(38) Landreth, Catherine, The Psychology of Early Childhood, Alfred A. Knopf, Inc., New York, 1964.

(39) Levenson, Stanley, "The Current Status of FLES Teaching in The U. S.", The Phi Delta Kappan, 42:265-268, 1961.

(40) Molloy, Julia S., Teaching The Retarded Child To Talk, The John Day Company, New York, 1961.

(41) Montessori, Maria, Education For a New World, Theosophical Press, Wheaton, Illinois, 1959.

(42) "Montessori in Perspective", National Association For The Education of Young Children, Washington, D. C., 1966.

(43) Mussen, Paul Henry, Conger, John Janeway, and Kagan, Jerome, Child Development and Personality, Harper and Row, Publishers, New York, 1963.

(44) Piaget, Jean, The Language and Thought of the Child, Harcourt, Brace and Company, New York, 1932.

(45) Ripple, Richard E., Readings in Learning and Human Abilities, Harper and Row, Publishers, New York, 1964.

(46) Russell, David, Children's Thinking, Gill and Company, Boston, Massachusetts, 1956.

(47) Santostefano, Sebastian G., "A Developmental Study of The Cognitive Control", Merrill-Palmer Quarterly, 10(4):343-360, 1964.

(48) Scheerer, Constance, Cognition, Harper and Row, Publishers, New York, 1964.

(49) Schlimbach, Alice, Die Familie Schiller, Max Hueber Verlag, Muenchen, Deutschland, 1964.

(50) Scott, J. P., "Critical Periods in Behavioral Development", Science, 138:949-955, 1962.

(51) Selltiz, Claire, Jahoda, Marie, Deutsch, Morton, and Cook, Stuart W., Research Methods in Social Relations, Holt, Rinehart and Winston, Inc., New York, 1961.

(52) Shindell, Sidney, Statistics, Science and Sense, University of Pittsburgh Press, Pittsburgh, Pennsylvania, 1964.

(53) Sigel, Irving E., "The Attainment of Concepts", Review of Child Development Research, Russell Sage Foundation, New York, 1964, pp. 209-48.

(54) Spodek, Bernard, "Poverty, Education, and the Young Child", Young Children, 21(1):3-8, 1965.

(55) "The Problems Facing FLES", The Modern Language Journal, 44:272-274, 1960.

(56) Thompson, Elizabeth Engle, and Hamalainen, Arthur E., Foreign Language Teaching in Elementary Schools, Association For Supervision and Curriculum Development, NEA, Washington, D. C., 1958.

(57) Troxell, Eleanor, Language and Literature in the Kindergarten and Primary Grades, Charles Scribner's Sons, New York, 1927.

(58) Wann, Kenneth D., Dorn, Miriam Selchen, and Liddle, Elizabeth Ann, Fostering Intellectual Development in Young Children, Teachers' College Press, Teachers' College, Columbia University, New York, 1965.

(59) White, R. W., "Motivation Reconsidered: The Concept of Competence", Psychological Review, 66:297-333, 1959.

(60) Whiteman, Martin, "Intelligence and Learning", Merrill-Palmer Quarterly, 10(3):297, 1964.

(61) Wohlwill, Joachim, "Piaget's System as a Source of Empirical Research", Merrill-Palmer Quarterly, 9(4):253-262, 1963.

VITA

Gordon G. Geddes

Candidate for the Degree of

Master of Science

Thesis: Developmental Learning of Concepts of the Pre-School Child

Major Field: Child Development

Biographical Information:

Personal Data: Born at Logan, Utah, January 21, 1941, son of Grant and Verna Larsen Geddes; married ReNae Peterson, September 10, 1964; two children -- Gregory and Jennifer.

Education: Attended elementary school in Logan, Utah; graduated from Logan Senior High School in 1959; received Bachelor of Arts degree from Weber State College, Ogden, Utah, with a major in Languages and a minor in Zoology, in 1966; did graduate work in Child Development at Utah State University, 1966-1967; completed requirements for the Master of Science Degree, in Child Development, at Utah State University, in 1967.

Professional Experience: Graduate Assistant in Child Development, September 1966 to June 1967; Head Teacher in Nursery School, Utah State University Child Development Laboratory, Summer of 1967.